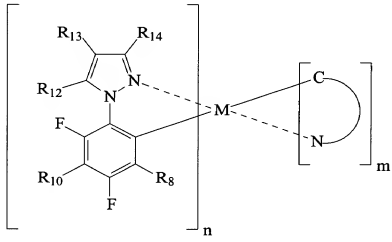
AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in this application.

1. (currently amended) A compound, having the structure:



wherein

M is a metal having an atomic weight greater than 40;

(C-N) is a substituted or unsubstituted cyclometallated ligand, and (C-N) is different from at least one other ligand attached to the metal;

each of R_8, R_{10}, and R_{12} to R_{14} is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group, wherein each R is independently selected from H, alkyl, alkylaryl, and aryl~~, and heteroaryl~~;

additionally or alternatively, any two adjacent substituted positions together form, independently, a fused 4- to 7-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the 4- to 7-member cyclic group may be optionally substituted with a substituent independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group, wherein each R is independently selected from H, alkyl, alkylaryl, and aryl~~, and heteroaryl~~;

m has a value of at least 1;

n has a value of at least 1; and

m + n is the maximum number of ligands that may be attached to the metal.

2. (original) The compound of claim 1, wherein n is 2.

3. (original) The compound of claim 2, wherein each ligand is organometallic.

4. (canceled)

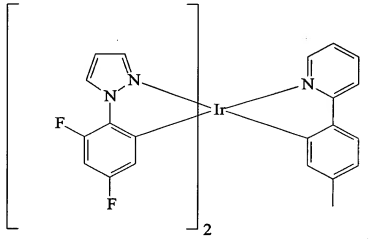
5. (previously presented) The compound of claim 1, wherein M is selected from the group consisting of Ir, Pt, Pd, Rh, Re, Ru, Os, Tl, Pb, Bi, In, Sn, Sb, Te, Au, and Ag.

6. (original) The compound of claim 5, wherein M is Ir.

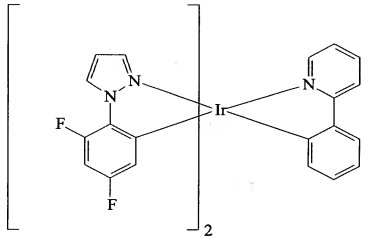
7. (original) The compound of claim 6, wherein R_8, R_{10}, and R_{12}-R_{14} are H.

8. (original) The compound of claim 7, wherein n is 2 and m is 1.

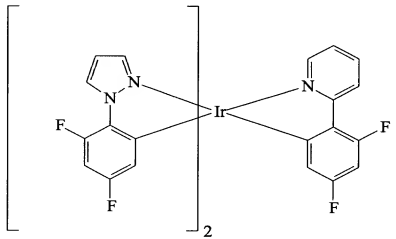
9. (previously presented) The compound of claim 8, having the structure:



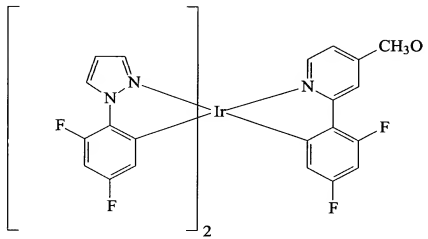
10. (previously presented) The compound of claim 8, having the structure:



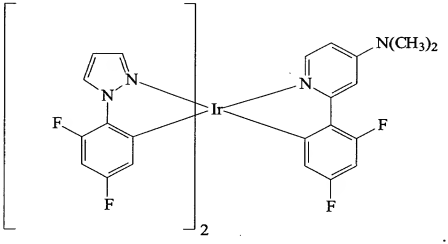
11. (previously presented) The compound of claim 8, having the structure:



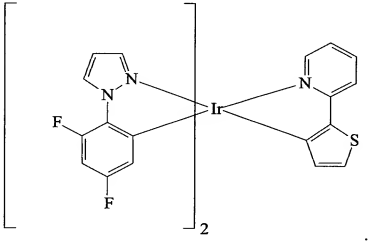
12. (previously presented) The compound of claim 8, having the structure:



13. (previously presented) The compound of claim 8, having the structure:



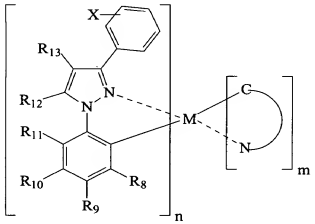
14. (previously presented) The compound of claim 8, having the structure:

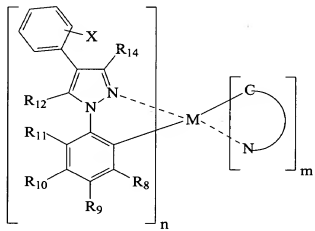


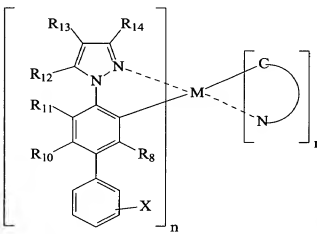
15. (currently amended) The compound of claim 1, wherein at least one of R_8, R_{10}, ~~R_{11}~~ R_{12} to R_{14}, and a substituent of (C-N) is independently selected from substituted or unsubstituted phenyl, naphthyl, or pyridyl .

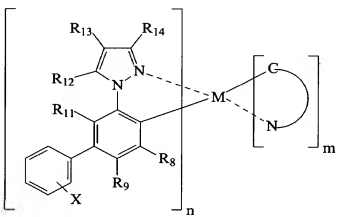
16. (previously presented) The compound of claim 15, wherein at least one of R_8, R_{10}, ~~R_{11}~~ R_{12} to R_{14}, and a substituent of (C-N) is phenyl.

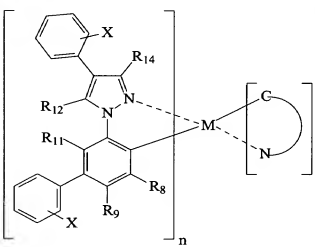
17. (withdrawn) The compound of claim 16, wherein the compound has a structure selected from the group consisting of:

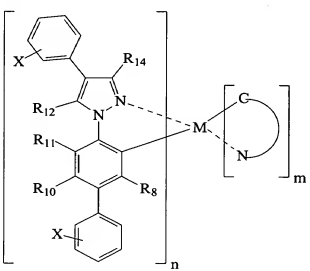








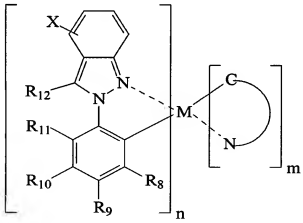


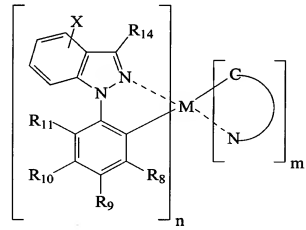


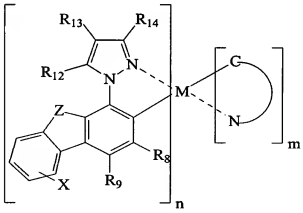
wherein X is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group;

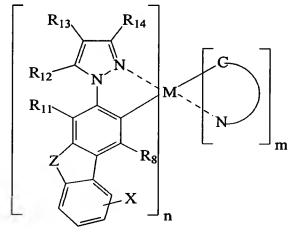
additionally or alternatively, any two adjacent substituted positions together form, independently, a fused 4- to 7-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the 4- to 7-member cyclic group may be further substituted by substituent X.

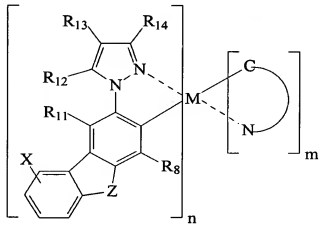
18. (withdrawn) The compound of claim 1, wherein the compound has a structure selected from the group consisting of:











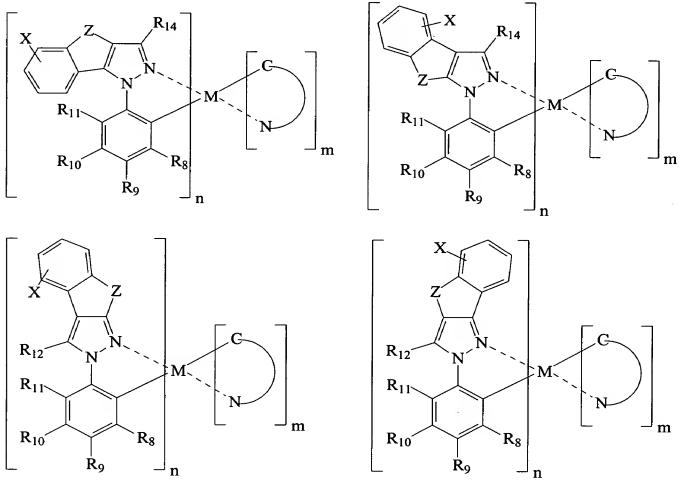
wherein

X is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group;

additionally or alternatively, any two adjacent substituted positions together form, independently, a fused 4- to 7-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the 4- to 7-member cyclic group may be further substituted by substituent X;

Z is selected from $-CH_2$, -CRR, -NH, -NR, -O, -S, -SiR.

19. (withdrawn) The compound of claim 18, wherein the compound has a structure selected from the group consisting of:

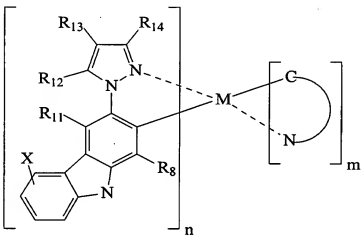


20. (original) The compound of claim 1, wherein the compound is a phosphorescent emissive material.

21. (previously presented) The compound of claim 1, wherein at least one ligand is a phosphorescent emissive ligand in the compound at room temperature, and at least one ligand is not a phosphorescent emissive ligand in the compound at room temperature.

22. (canceled)

23. (withdrawn) A compound, having the structure:



wherein

M is a metal having an atomic weight greater than 40;

(C-N) is a substituted or unsubstituted cyclometallated ligand;

each R is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group;

additionally or alternatively, any two adjacent substituted positions together form, independently, a fused 4- to 7-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the 4- to 7-member cyclic group may be optionally substituted with substituent R or CN;

X is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group;

n has a value of at least 1; and

m + n is the maximum number of ligands that may be attached to the metal.

24. (withdrawn) The compound of claim 23, wherein n is 3 and m is zero.

25. (withdrawn) The compound of claim 24, wherein M is selected from the group consisting of Ir, Pt, Pd, Rh, Re, Ru, Os, Tl, Pb, Bi, In, Sn, Sb, Te, Au, and Ag.

26. (withdrawn) The compound of claim 25, wherein M is Ir.

27. (withdrawn) The compound of claim 26, wherein R_8, and R_{11}-R_{14} are H.

28. (previously presented) The compound of claim 21,
wherein
the ligand emissive in the compound at room temperature has a triplet energy corresponding to a wavelength that is at least 80 nm greater than the wavelength corresponding to the triplet energy of the ligand that is not emissive in the compound at room temperature.

29. (previously presented) The compound of claim 28, wherein the emissive ligand is organometallic.

30. (canceled)

31. (previously presented) The compound of claim 28, wherein the emissive ligand has a triplet energy corresponding to a wavelength of 500-520 nm.

32. (previously presented) The compound of claim 28, wherein the emissive ligand has a triplet energy corresponding to a wavelength greater than 590 nm.

33. (previously presented) The compound of claim 28,
wherein each ligand is organometallic.

34. (canceled)

35. (previously presented) The compound of claim 33, wherein the emissive ligand has a triplet energy corresponding to a wavelength of 500-520 nm.

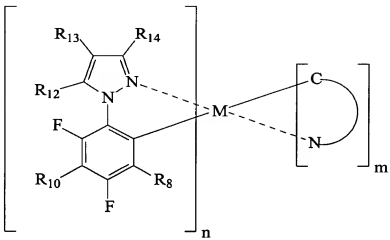
36. (previously presented) The compound of claim 33, wherein the emissive ligand has a triplet energy corresponding to a wavelength greater than 590 nm.

37. (currently amended) An organic light emitting device, comprising:

(a) an anode;

(b) a cathode; and

(c) an emissive layer disposed between and electrically connected to the anode and the cathode, the emissive layer comprising a compound having the structure



wherein

M is a metal having an atomic weight greater than 40;

(C-N) is a substituted or unsubstituted cyclometallated ligand, and (C-N) is different from at least one other ligand attached to the metal;

each of R_8, R_{10}, and R_{12} to R_{14} is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group, and each R is independently selected from H, alkyl, alkylaryl, and aryl~~, and heteroaryl~~;

additionally or alternatively, any two adjacent substituted positions together form, independently, a fused 4- to 7-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the 4- to 7-member cyclic group may be optionally substituted with a substituent independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group,

wherein each R is independently selected from H, alkyl, alkylaryl, and aryl~~, and heteroaryl~~;

m has a value of at least 1;

n has a value of at least 1; and

m + n is the maximum number of ligands that may be attached to the metal.

38. (original) The device of claim 37, wherein n is 2.

39. (original) The device of claim 38, wherein each ligand is organometallic.

40. (canceled)

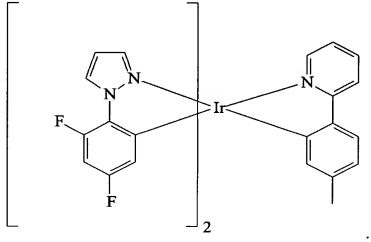
41. (previously presented) The device of claim 37, wherein M is selected from the group consisting of Ir, Pt, Pd, Rh, Re, Ru, Os, Tl, Pb, Bi, In, Sn, Sb, Te, Au, and Ag.

42. (original) The device of claim 41, wherein M is Ir.

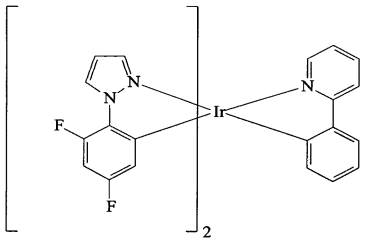
43. (original) The device of claim 42, wherein R_8, R_{10}, and R_{12}-R_{14} are H.

44. (original) The device of claim 43, wherein n is 2 and m is 1.

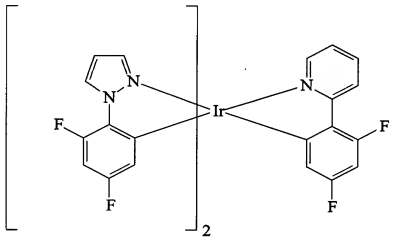
45. (previously presented) The device of claim 44, wherein the compound has the structure:



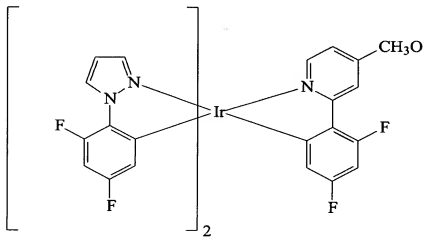
46. (previously presented) The device of claim 44, wherein the compound has the structure:



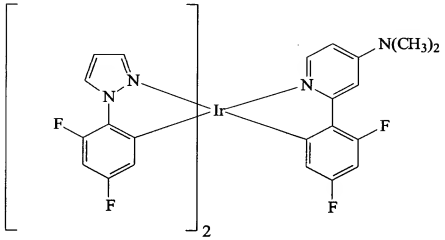
47. (previously presented) The device of claim 44, wherein the compound has the structure:



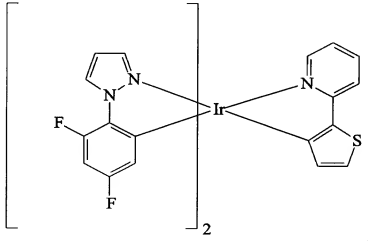
48. (previously presented) The device of claim 44, wherein the compound has the structure:



49. (previously presented) The device of claim 44, wherein the compound has the structure:



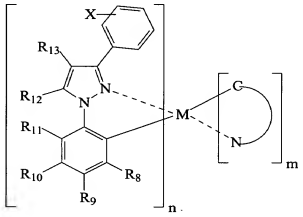
50. (previously presented) The device of claim 44, wherein the compound has the structure:

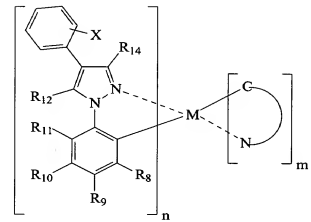


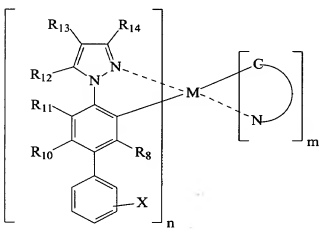
51. (currently amended) The device of claim 37, wherein at least one of R_8, R_{10}, ~~R_{11}~~ R_{12} to R_{14}, and a substituent of the (C-N) is independently selected from substituted or unsubstituted phenyl, naphthyl, or pyridyl .

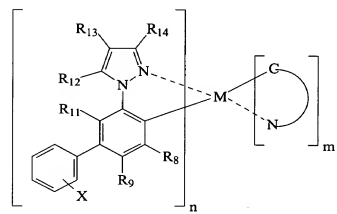
52. (currently amended) The device of claim 51, wherein at least one of R_8, R_{10}, ~~R_{11}~~ R_{12} to R_{14}, and a substituent of the (C-N) is phenyl.

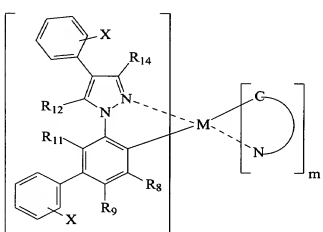
53. (withdrawn) The device of claim 52, wherein the device has a structure selected from the group consisting of:

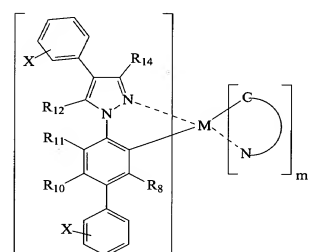








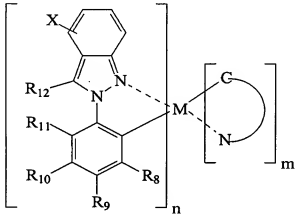


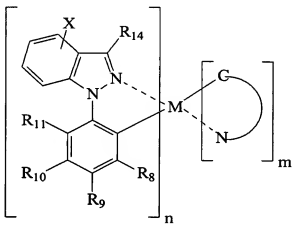


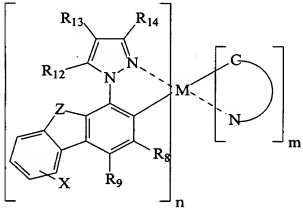
wherein X is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group;

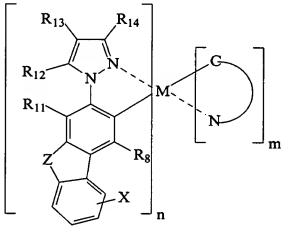
additionally or alternatively, any two adjacent substituted positions together form, independently, a fused 4- to 7-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the 4- to 7-member cyclic group may be further substituted by substituent X.

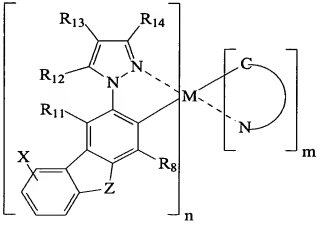
54. (withdrawn) The device of claim 37, wherein the device has a structure selected from the group consisting of:











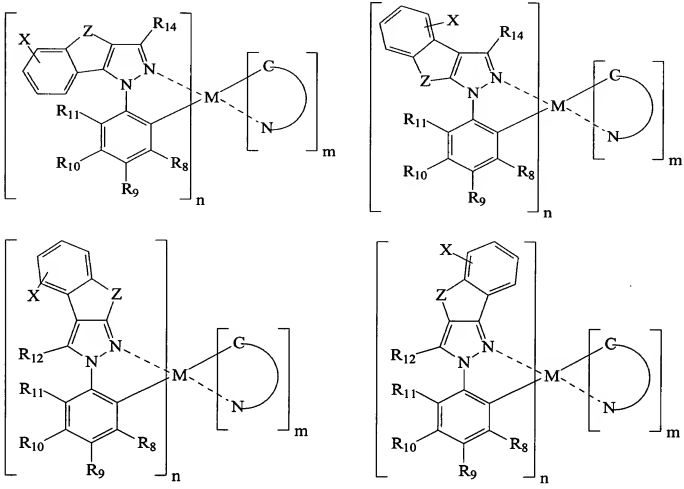
wherein

X is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group;

additionally or alternatively, any two adjacent substituted positions together form, independently, a fused 4- to 7-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the 4- to 7-member cyclic group may be further substituted by substituent X;

Z is selected from $-CH_2$, -CRR, -NH, -NR, -O, -S, -SiR.

55. (withdrawn) The device of claim 54, wherein the compound has a structure selected from the group consisting of:



56. (original) The device of claim 37, wherein the compound is a phosphorescent emissive material.

57. (previously presented) The device of claim 37, wherein at least one ligand is a phosphorescent emissive ligand in the compound at room temperature and at least one ligand is not a phosphorescent emissive ligand in the compound at room temperature.

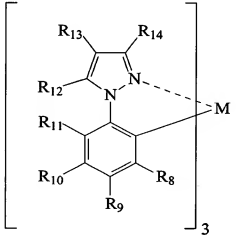
58. (canceled)

59. (withdrawn) An organic light emitting device, comprising:

(a) an anode;

(b) a cathode; and

(c) an emissive layer disposed between and electrically connected to the anode and the cathode, the emissive layer ~~further~~ comprising a compound having the structure:



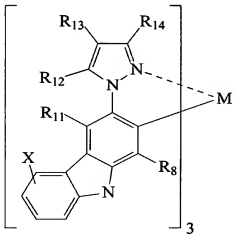
wherein

M is a metal having an atomic weight greater than 40;

each R is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group;

additionally or alternatively, any two adjacent substituted positions together form, independently, a fused 4- to 7-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the 4- to 7-member cyclic group may be optionally substituted with substituent R and CN.

60. (withdrawn) The device of claim 59, having the structure:



wherein

X is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group.

61. (withdrawn) The device of claim 60, wherein M is selected from the group consisting of Ir, Pt, Pd, Rh, Re, Ru, Os, Tl, Pb, Bi, In, Sn, Sb, Te, Au, and Ag.

62. (withdrawn) The device of claim 61, wherein M is Ir.

63. (withdrawn) The device of claim 62, wherein R_8, and R_{11}-R_{14} are H.

64. (previously presented) The organic light emitting device of claim 57, wherein

the ligand emissive at room temperature in the compound has a triplet energy corresponding to a wavelength that is at least 80 nm greater than the wavelength corresponding to the triplet energy of the ligand that is not emissive in the compound at room temperature.

65. (original) The device of claim 64, wherein the first ligand is organometallic.

66. (canceled)

67. (previously presented) The device of claim 64, wherein the first ligand has a triplet energy corresponding to a wavelength of 500-520 nm.

68. (previously presented) The device of claim 64, wherein the first ligand has a triplet energy corresponding to a wavelength greater than 590 nm.

69. (previously presented) The organic light emitting device of claim 64, wherein each ligand is organometallic.

70. (canceled)

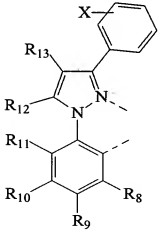
71. (previously presented) The device of claim 69, wherein the emissive ligand has a triplet energy corresponding to a wavelength of 500-520 nm.

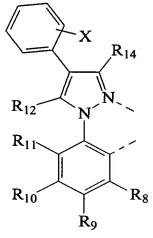
72. (previously presented) The device of claim 69, wherein the emissive ligand has a triplet energy corresponding to a wavelength greater than 590 nm.

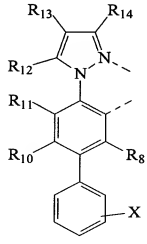
73. (original) The device of claim 69, wherein the device is incorporated into a consumer product.

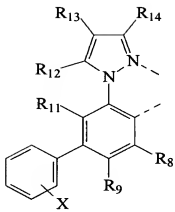
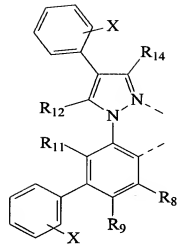
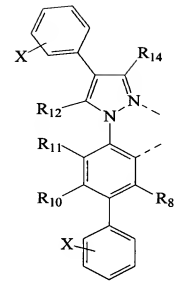
74. to 78. (canceled)

79. (withdrawn) The device of claim 78, wherein the ligand has a structure selected from the group consisting of:





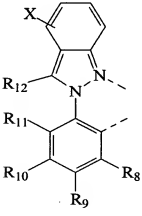
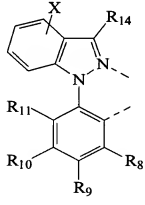
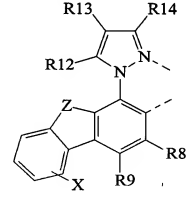


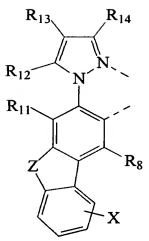
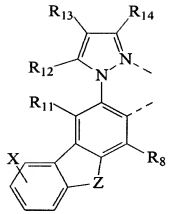




wherein X is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group;

additionally or alternatively, any two adjacent substituted positions together form, independently, a fused 4- to 7-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the 4- to 7-member cyclic group may be further substituted by substituent X.

80. (withdrawn) The device of claim 74, wherein the compound has a structure selected from the group consisting of:

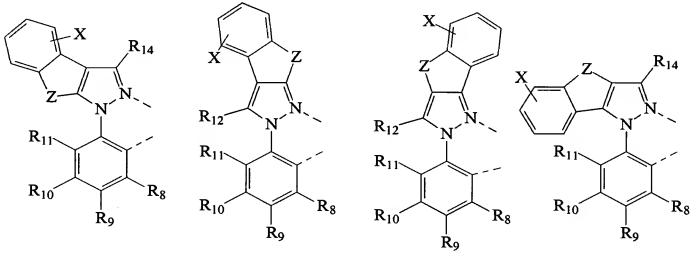
wherein

X is independently selected from hydrogen, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl, or a heterocyclic group;

additionally or alternatively, any two adjacent substituted positions together form, independently, a fused 4- to 7-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl, and wherein the 4- to 7-member cyclic group may be further substituted by substituent X;

Z is selected from $-CH_2$, -CRR, -NH, -NR, -O, -S, -SiR.

81. (withdrawn) The device of claim 80, wherein the ligand has a structure selected from the group consisting of:



82. to 88. (canceled)